PTO/SB/08A (10-96) -0031 ERCE

-		olus sign (+) inside this box erwark Reduction Act of 1995		rsons are required to resp	Pa pond to a collection of information unle	Approved for use through 10/31/99 OMB 0651- demark Office; U.S. DEPARTMENT OF COMME ss it distrays a valid OMB control number			
•		Re r form 1449A/PTO			Complete if Known				
	3 6	2/1			Application Number	10/020,733			
٦,	INF	ORMATION D)IS(CLOSURE	Filing Date	10/30/01			
<u> </u>	CT/	TEMENT BY	ΔΕ	PLICANT	First Named Inventor	Walke			
	10017	AI LIVILIAI DI	/~I	LIOAII	Group Art Unit	1645 / 6.52			
.v	ħ.	tuse as many sheets	as neci	essano	Examiner Name	To be assigned Moore			
Ş	Sheet	1	of	3	Attorney Docket Number	LEX-0263-USA			

				U.S. PATENT DOCUMENT	rs	
Examiner tials	Cite No.1	U S. Patent Document Kind C Number (if kno		Name of Patentee or Applicant of Cited Document	Date of Publication of cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
(AND) A ANDA	AA	4,215,051	T	Schroeder et al	07/29/80	
S June	AB	4,376,110		David et al	03/08/83	
5/	AC	4,594,595		Struckman	06/10/86	
	AD	4,631,211		Houghten	12/23/86	
	AE	4,689,405		Frank et al	08/25/87	
	AF	4,713,326		Dattagupta et al	12/15/87	
	AG	4,873,191		Wagner et al	10/10/89	
	АН	4,946,778		Ladner et al	08/07/90	
	Al	5,252,743		Barrett et al	10/12/93	
	AJ	5,272,057		Smulson et al.	12/21/93	
	AK	5,424.186		Fodor et al	06/13/95	
	AL	5,445.934		Fodor et al	08/29/95	
	AM	5,459,127		Felgner et al	10/17/95	
	AN	5,556,752		Lockhart et al	09/17/96	
	AO	5,700,637		Southern	12/23/97	
	AP	5,744,305		Fodor et al	04/28/98	
	AQ	5,830,721		Stemmer et al	11/03/98	
\neg	AR	5,837,458		Minshull et al	11/17/98	
	AS	5,869,336	†	Meyer et al.	02/09/99	
- 	AT	5,877,397		Lonberg et al	03/02/99	
1	AU	5,948,767	1	Scheule et al.	09/07/99	
	AV	6,075,181		Kucherlapati et al	06/13/00	
-W	AW	6,110,490		Thierry	08/29/00	
wwn	AX	6,150,584		Kucherlapati et al.	11/21/00	
					<u> </u>	
			ــــ			
	<u> </u>	<u> </u>	<u> </u>			
ı			L		<u> </u>	

Date Examiner Considered

*EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents. Washington, DC 20231.

¹ Unique citation designation number. 2 See attached Kinds of U.S. Patent Documents. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). *For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. * Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Approved for use through 10/31/99. OMB 0651-0031 and Trademark Office; U.S. DEPARTMENT OF COMMERCE

ons are required to respond to a collection of information unless it displays a valid OMB control number. Inder the Paperwork Reduction Act of 1995, no pers

Subs	stitute for form 1449B/PT	то		Complete if Known		
INE	ORMATION	יו חופרו	OSLIDE	Application Number	10/020,733	
				Filing Date	10/30/01	
SIA	ATEMENT I	BA WAL	LICANI	First Named Inventor	Walke	
				Group Art Unit	1645 /652	
	(use as many sh	neets as necess	ary)	Examiner Name	In be assigned Moore	
Sheet	2	of	3	Attorney Docket Number	LEX-0263-USA	

			OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
Exam R tial		Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²				
LASA	M	AΥ	Bird et al, 1988, "Single-Chain Antigen-Binding Proteins", Science 242 423-426.					
3 4 107			Bitter et al, 1987, "Expression and Secretion Vectors for Yeast", Methods in Enzymology 153:516-544.	L.				
	N. S.	ВА	Colbere-Garapin et al, 1981, "A New Dominant Hybrid Selective Marker for Higher Eukaryotic Cells", J. Mol. Biol. 150:1-14.					
		BB	Gautier et al, 1987, "α-DNA IV:α-anomeric and β-anomeric tetrathymidylates covalently linked to intercalating oxazolopyridocarbazole. Synthesis, physiochemical properties and poly (rA) binding", Nucleic Acids Research 15(16):6625-6641.					
		BC	Gordon, 1989, "Transgenic Animals", International Review of Cytology. 115:171-229.					
		BD	Greenspan et al, 1993, "Idiotypes: structure and immunogenicity", FASEB Journal 7:437-444.					
		BE	Gu et al, 1994, "Deletion of a DNA Polymerase β Gene Segment in T Cells Using Cell Type-Specific Gene Targeting", Science 265:103-106.					
			Huse et al, 1989, "Generation of a Large Combinatorial Library of the Immunoglobulin Repertoire in Phage Lambda", Science 246:1275-1281.					
			Huston et al, 1988, "Protein engineering of antibody binding sites: Recovery of specific activity in an anti-digoxin single- chain Fv analogue produced in Escherichia coli", Proc. Natl. Acad. Sci. USA 85:5879-5883.					
			Inoue et al, 1987, "Sequence-dependent hydrolysis of RNA using modified oligonucleotide splints and R Nase H", FEBS Letters 215(2):327-330.					
			Inoue et al, 1987, "Synthesis and hybridization studies on two complementary nona(2'-O-methyl)ribonucleotides", Nucleic Acids Research 15(15):6131-6149.					
			Inouye & Inouye, 1985, "Up-promoter mutations in the lpp gene of Escherichia coli", Nucleic Acids Research 13(9):3101-3110.					
			Janknecht et al, 1991, "Rapid and efficient purification of native histidine-tagged protein expressed by recombinant vaccinia virus", PNAS 88:8972-8976.					
			Kohler & Milstein, 1975, "Continuous cultures of fused cells secreting antibody of predefined specificity", Nature 256:495-497.					
			Lakso et al, 1992, "Targeted oncogene activation by site-specific recombination in transgenic mice", Proc. Natl. Acad. Sci. USA 89:6232-6236.					
			Lavitrano et al, 1989, "Sperm Cells as Vectors for Introducing Foreign DNA into Eggs: Genetic Transformation of Mice", Cell 57:717-723.					
	ľ		Lo, 1983, "Transformation by Iontophoretic Microinjection of DNA Multiple Integrations without Tandem Insertions", Mol. Cell. Biology 3(10):1803-1814.	k				
1	1		Logan et al, 1984, "Adenovirus tripartite leader sequence enhances translation of mRNAs late after infection", Proc. Natl. Acad. Sci. USA 81:3655-3659.					
WILL	1/1	BQ	Lowy et al, 1980, "Isolation of Transforming DNA: Cloning the Hamster aprt Gene", Cell 22:817-823.					

Examiner Signature	William W. Marves	Date Considered (1) October 2003
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

^{*}EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box Patent and proved for use through 10/31/99. OMB 0651-0031
Patent and persons are required to respond to a collection of information unless it displays a valid OMB control number.

Subs	stitute for form 1449B/PTO			Complete if Known		
INE	ORMATION	חופו	CLOSURE	Application Number	10/020,733	
				Filing Date	10/30/01	
214	ATEMENT BY	r Ar	PLICANT	First Named Inventor	Walke	
				Group Art Unit	1645 1652	
	(use as many sheets	as nec	essary)	Examiner Name	To-be-assigned Moore	
Sheet	3	of	3	Attorney Docket Number	LEX-0263-USA	

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
www	BR	Morrison et al, 1984, "Chimeric human antibody molecules: Mouse antigen-binding domains with human constant region domains", Proc. Natl. Acad. Sci. USA 81:6851-6855.	
4	BS	Mulligan & Berg, 1981, "Selection for animal cells that express the Escherichia coli gene coding for xanthine-guanine phosphoribosyltransferase", Proc. Natl. Acad. Sci. USA 78(4):2072-2076.	T
ric.	BT	Neuberger et al, 1984, "Recombinant antibodies possessing novel effector functions", Nature 312:604-608.	I
	BU	Nisonoff, 1991, "Idiotypes: Concepts and Applications", J. of Immunology 147:2429-2438.	I
	BV	O'Hare et al, 1981, "Transformation of mouse fibroblasts to methotrexate resistance by a recombinant plasmid expressing a prokaryotic dihydrofolate reductase", Proc. Natl. Acad. Sci. USA 78(3):1527-1531.	
	BW	Ruther et al, 1983, "Easy identification of cDNA clones", EMBO Journal 2(10):1791-1794.	I
	ВХ	Santerre et al, 1984, "Expression of prokaryotic genes for hygromycin B and G418 resistance as dominant-selection markers in mouse L cells", Gene 30:147-156.	I
	BY	Sarin et al, 1988, "Inhibition of acquired immunodeficiency syndrome virus by oligodeoxynucleoside methylphosphonates", Proc. Natl. Acad. Sci. USA 85:7448-7451.	I
	BZ	Smith et al, 1983, "Molecular Engineering of the Autographa californica Nuclear Polyhedrosis Virus Genome: Deletion Mutations within the Polyhedrin Gene", J. Virol. 46(2):584-593.	
	CA	Stein et al, 1988, "Physiochemical properties of phosphorothioate oligodeoxynucleotides", Nucleic Acids Research 16(8):3209-3221.	I
	СВ	Szybalska & Szybalski, 1962, "Genetics of Human Cell Lines, IV. DNA-Mediated Heritable Transformation of a Biochemical Trait", Proc. Natl. Acad. Sci. USA 48:2026-2034.	
	СС	Takeda et al, 1985, "Construction of chimaeric processed immunoglobulin genes containing mouse variable and human constant region sequences", Nature 314:452-454.	
	CD	Thompson et al, 1989, "Germ Line Transmission and Expression of a Corrected HPRT Gene Produced by Gene Targetin in Embryonic Stem Cells", Cell 56:313-321.	
	CE	Van Der Putten et al, 1985, "Efficient insertion of genes into the mouse germ line via retroviral vectors", Proc. Natl. Acad. Sci. USA 82:6148-6152.	
	CF	Van Heeke et al, 1989, "Expression of Human Asparagine Synthetase in Escherichia coli", J. Biol. Chemistry 264(10):5503-5509.	
	CG	Ward et al, 1989, "Binding activities of a repertoire of single immunoglobulin variable domains secreted from Escherichia coli", Nature 341:544-546.	
V	СН	Wigler et al, 1977, "Transfer of Purified Herpes Virus Thymidine Kinase Gene to Cultured Mouse Cells", Cell 11:223-232.	
www	СІ	Wigler et al, 1980, "Transformation of mammalian cells with an amplifiable dominant-acting gene", Proc. Natl. Acad. Sci. USA 77(6):3567-3570.	

Examiner Signature	Willen W. Moore	Date Considered 10 October 1003
		<i>ـ النظام المساور المنظم ا</i>

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents. Washington, DC 20231.

^{*}EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08A (10-96)

		us sign (+) inside this box		erso required to reso	roved for use through 1/03/1/99. OMB 0651-0031 Patent and Tark Office; U.S. DEPARTMENT OF COMMERCE spond to a collection of information unless it dvs a valid OMB control number.			
	\mathbf{P}	te fortom 1449A/PTO			Complete if Known			
	APR 2 1 20	1 5 EN			Application Number	10/020,733		
		SUPPLEN	IEN	TAL	Filing Date	10/30/01		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT Sheet 1 01 2					First Named Inventor	Walke		
					Group Art Unit	1650		
	STATEMENT BY APPLICANT				Examiner Name	To be assigned // our		
	Sheet	1	of	2	Attorney Docket Number	LEX-0263-USA		

				U.S. PATENT DOCUMEN	TS	
Examiner i Initials*	Cite No. ¹	U.S. Patent Number	Document Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
						· · · · · · · · · · · · · · · · · · ·
						
						물 <u>,</u> 교
						-
					-	
						55 20 <
						17.5 Promp
						<u> </u>
						<u> </u>
					<u> </u>	
					 	•
					T	

	FOREIGN PATENT DOCUMENTS								
Examiner	Cite	Foreign Patent Document			Name of Detector of Applicant	Date of	Pages, Columns, Lines,		
Initials*	No.1	Office	Number ⁴	Kind Code ^s (<i>if known</i>)	Name of Patentee or Applicant of Cited Document	Publication of cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear	Le	
www	CJ	wo	97/09420	A2	Celltech Therapeutics Ltd.	03/13/97			
www	СК	wo	00/73323	A2	Human Genome Sciences Inc	12/07/00			
						11		1	

Examiner	11. 11 11	Date	1 1
Signature	William W-Morre	Considered	10 October 2003

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

^{*}EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

	Please type a plus sign (+) inside this box • □ Volume The Repeavork Reduction Act of 1995, no persons are required to				PTO/SB/08B (10- Approved for use through 10/31/99. OMB 0651-00 Patent and Trademark Office; U.S. DEPARTMENT OF COMMER to respond to a collection of information unless it displays a valid OMB control number.			
	Substitute for form 1449B/PTO				Complete if Known			
AF	k 2 1 20	SUPPLEN	TENT	٠٨١	Application Numb r	10/020,733		
13.	INIT	BMATION D		AL	Filing Dat	10/30/01		
(G)	INFC	DEMATION D	usci	-OSURE	First Named Inventor	Walke		
~	STA	FEMENT BY	APP	LICANT	Group Art Unit	1645 1.652		
	INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Examiner Name	Toberssigned Murre		
ŀ	Sheet	2	of	2	Attorney Docket Number	LEV.0263-USA		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS								
Examiner Initials*	niner Cite Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.							
www	CL	Fritsche, J. et al., "Molecular cloning and characterization of a human metalloprotease disintegrin - a noval marker for dendritic cell differentiation," 07/15/00, Blood, Vol. 96, No. 2, pgs. 732-739, XP001119962.						
/ NEW	СМ	Database EMBL 'Online', ADAM gene 2, 03/20/01, RUBEN et al., retrieved from EMBL, Database accession no. AAC91177, XP002236360, abstract.						
uun	CN	WEI, P. et al., "Expression and enzymatic activity of human disintegrin and metalloproteinase ADAM19/meltrin beta," 01/26/01, Biochemical and Biophysical Research Communications, Academic Press Inc., Orlando, FL, Vol. 280, No. 3, pgs. 744-755, XP001120634, ISSN: 0006-291X.						
		International Search Report, International Application No. PCT/US01/48498, 10/20/61 (Attorney Decket No. CEX-0203-PCT)						
	 							
	<u> </u>	ri _	-					
			-					
		当 記 記 記 記	_					
		i i i i i i i i i i i i i i i i i i i	\vdash					
			-					
			-					
		1/2900						
		6	_					
			\dashv					
			_					
			ㅓ					
			\dashv					
			\neg					
			一					
			-1					
			一					
			ㅓ					

Examiner Signature	1111 Ugenll- Movor	Date Considered	10 October 2003

*EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁴ Applicant is to place a check mark here if English language Translation is attached.